

What is claimed is:

1 1. A folding electronic device comprising:
2 a body;
3 an upper housing portion disposed on the body in a
4 manner such that the upper housing portion
5 rotates between a closed position and an open
6 position;
7 a transmitting member disposed between the body and
8 the upper housing portion in a manner such that
9 the transmitting member rotates between a first
10 position and a second position, wherein the
11 upper housing portion rotates along with the
12 transmitting member;
13 a first elastic member disposed between the
14 transmitting member and the body so as to
15 rotate the transmitting member to the second
16 position; and
17 a sliding member disposed in the body in a manner
18 such that the sliding member rotates between a
19 third position and a fourth position so as to
20 rotate the transmitting member, wherein the
21 sliding member is engaged with the transmitting
22 member located in the first position when the
23 sliding member is located in the third
24 position, and the sliding member is disengaged
25 from the transmitting member so that the
26 transmitting member rotates to the second
27 position by the first elastic member and the
28 upper housing portion rotates to the open

29 position from the closed position when the
30 sliding member is moved to the fourth position
31 from the third position.

1 2. The electronic device as claimed in claim 1,
2 further comprising:

3 a second elastic member disposed in the body so as
4 to maintain the sliding member at the third
5 position.

1 3. The electronic device as claimed in claim 2,
2 wherein the elastic force of the second elastic member
3 exceeds that of the first elastic member.

1 4. The electronic device as claimed in claim 2,
2 wherein the second elastic member is a compression
3 spring.

1 5. The electronic device as claimed in claim 2,
2 wherein the body includes a first receiving portion for
3 receiving the second elastic member.

1 6. The electronic device as claimed in claim 2,
2 wherein the sliding member includes a first protrusion
3 inserting into the second elastic member so that the
4 second elastic member returns the sliding member to the
5 third position.

1 7. The electronic device as claimed in claim 1,
2 wherein the body comprises:

3 a first case on which the first elastic member is
4 fixed; and

5 a second case combined with the first case.

1 8. The electronic device as claimed in claim 7,
2 wherein the first case includes a second receiving
3 portion for receiving the transmitting member and the
4 first elastic member.

1 9. The electronic device as claimed in claim 7,
2 wherein the first case includes a first groove in which
3 the first elastic member is disposed.

1 10. The electronic device as claimed in claim 7,
2 wherein each of the first case and the second case
3 includes a concave portion corresponding to the sliding
4 member respectively so that the sliding member slides in
5 the concave portion.

1 11. The electronic device as claimed in claim 10,
2 wherein the sliding member is formed with a slot
3 corresponding to the concave portion.

1 12. The electronic device as claimed in claim 1,
2 wherein the upper housing portion includes a second
3 protrusion, the transmitting member includes a first
4 notch corresponding to the second protrusion, and the
5 transmitting member rotates the upper housing portion by
6 way of the second protrusion engaging the first notch.

1 13. The electronic device as claimed in claim 1,
2 wherein the transmitting member includes a second notch,
3 the sliding member includes a third protrusion, and the
4 sliding member engages with the transmitting member by
5 way of the third protrusion abutting the second notch.

1 14. The electronic device as claimed in claim 1,
2 wherein the transmitting member includes a second groove
3 in which the first elastic member is fixed.

1 15. The electronic device as claimed in claim 1,
2 wherein the first elastic member is a torsional spring.

1 16. The electronic device as claimed in claim 1,
2 wherein the electronic device is a mobile phone.